ePIC SIDIS PWG Meeting May 28, 2024

 SIDIS Working Group

Conveners: Charlotte Van Hulse (U Alcala),
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Wiki of the SIDIS PWG: https://wiki.bnl.gov/EPIC/index.php?title=SIDIS

PWG meetings: Tuesday 2.30 pm (~ every 2 weeks)

SIDIS Working Group

Announcement from the software group: PID implementation in the MC

- PID lookup tables have been implemented in the May simulation campaign

- Details can be found under:

  https://indico.bnl.gov/event/23065/contributions/90375/attachments/53991/93613/pid_lut.pdf

» LUT PID is the new default

» Randomized value (see the original spec) stored to `edm4eic::ReconstructedParticle::PDG` field

» Each lookup step will overwrite the randomized value if LUT entry is found

» All found probabilities are stored in the `edm4eic::ReconstructedParticle::particleIDUsed` relation

» `edm4hep::ParticleID::type` stores which detector's LUT table the values came from

➔ Check the impact of the more realistic PID on your analysis!

➔ Tests of the new PID have been requested for the next joint meeting of the Physics WGs and Software & Computing on June 26